



Focus on

Managing Livestock Nutrients

from Ecology's Water Quality Program

Issue

Nutrients from dairies and other livestock operations are regulated through programs that are currently co-administered by the Washington departments of Agriculture and Ecology. These programs work to protect water quality from livestock nutrient discharges through the combination of regulations, education, and technical assistance, as well as through coordination with related agencies, industry, and other stakeholders.

An operation defined as a Concentrated Animal Feeding Operation (CAFO) is considered a point source of pollution and is regulated under the National Pollutant Discharge Elimination System (NPDES) permitting process. The Department of Ecology (Ecology) has completed writing a general NPDES permit to cover all CAFOs including dairies and animal feeding operations that discharge or propose to discharge. The final permit was issued on June 21, 2006. After a 30 day appeal period, the permit will become effective on July 21, 2006. Ecology is in charge of writing and administering the CAFO general permit; however, Department of Agriculture is responsible for inspecting the CAFOs and working with them to solve compliance problems.

Background

Department of Ecology regulated dairies until July 1, 2003, when all powers, duties, and functions pertaining to the 1998 Dairy Nutrient Management Act were transferred from Ecology to Department of Agriculture. Upon delegation by the Environmental Protection Agency, Washington Department of Agriculture will fully implement the new NPDES permit which addresses CAFOs, including dairies. The Environmental Protection Agency (EPA) has extended compliance dates in the 2003 CAFO Rule. EPA extended the requirement to develop a nutrient management plan from December 31, 2006, to July 31, 2007. EPA has also extended the date for newly defined CAFOs, who are required to apply for the CAFO Permit from February 13, 2006, to July 31, 2007.

Purpose and conditions of the general permit

The NPDES general permit covers discharges of wastewater from CAFOs to waters of Washington State. Under federal and state water quality law, a permit is required for the discharge of wastewater. The permit requires that CAFOs manage manure to prevent polluting rivers, lakes, and aquifers. Livestock operators must keep animals out of surface water. The permit requires CAFOs to develop and implement nutrient management plans and submit reports to the state annually. Among other elements, nutrient management plans must show that operators have an adequate amount of storage for manure and that manure used as fertilizers is applied appropriately to avoid pollution.



Managing nutrients for facilities not covered under a permit

Departments of Ecology and Agriculture are working together to ensure those facilities that are not regulated by a permit have the technical knowledge, training and tools to prevent the discharge of pollutants to water. Polluted water runoff from livestock is mostly controlled through educational and outreach efforts. Producer groups and individual farmers are provided with technical assistance and training skills that emphasize site risk assessment and implementation of best management practices (BMPs) for the protection of water quality. Through voluntary compliance, operators can apply methods that manage nutrients properly. For example, in Garfield County, Department of Ecology staff worked with the local conservation district, the Natural Resources Conservation Service and a private land owner to improve the water quality of a tributary to the Snake River. Along a ten-mile stretch of Alpowa Creek, cattle were fenced away while off-stream water sources were developed, riparian plantings were installed and other BMPs were implemented. Within three years the stream buffer was restored and water quality improved for Alpowa Creek due to implementation of these 'non-regulatory' innovative measures. The commitment to clean water by landowners on Alpowa Creek is quickly paying dividends. Native vegetation is returning to the riparian area, and water quality monitoring data indicate the stream is now meeting state water quality standards most months. In addition, many landowners have been pleasantly surprised with the on-the-ground results. While they point out water quality and fish habitat projects create some new management challenges, they also have observed some exciting economic benefits to their operations. By providing off-stream water in strategic locations, livestock are now better dispersed throughout their range. This has resulted in healthier grasses and improved forage. In turn, animals are typically more robust and healthy, and the amount of supplemental feed needed during the year is reduced.

Conservation Commission

The Conservation Commission manages the state-funded cost share program to assist livestock operations in paying for structures or equipment needed to implement livestock nutrient management plans. It also provides limited financial and technical support to conservation districts to enable them to offer technical assistance to dairies and livestock facilities through plan development, engineering work, and education. For more information contact

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